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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------|------------------|
| 10/789,501  | 02/27/2004  | Jeffrey S. Lille     | SJO920000168US2,<br>38.11D1 | 9096             |
| 24033   | 7590        | 05/11/2006           | EXAMINER                    |                  |
| KONRAD RAYNES & VICTOR, LLP<br>315 S. BEVERLY DRIVE<br># 210<br>BEVERLY HILLS, CA 90212 |             |                      | CAO, ALLEN T                |                  |
|   |             |                      | ART UNIT                    | PAPER NUMBER     |
|   |             |                      | 2627                        |                  |

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/789,501

Applicant(s)

LILLE, JEFFREY S.

Examiner

Allen T. Cao

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 11-14 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 10 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/13/06</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

1. Claims 11-15 are objected to because of the following informalities:

a) The term "a" in front of the term "opening" in claim 11, line 2 should be changed to --an--.

b) The term "a" in front of the term "slider" in claim 15, line 1 should be changed to --said-- or --the--, because "a slider" has been introduced in claim 11, line 3.

Appropriate correction is required.

c) The term "member" in claim 18, line 1 should be changed to --membrane--.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 9, 11-14 and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Hipwell et al (US. 2003/0030942 A1).

Hipwell et al discloses a head suspension assembly having a suspension arm 100 having a trench (124's) formed therein; and a membrane (bond pads 112, 114; [0014], lines 1-4) positioned on the suspension arm and adapted to support a slider 164 thereon, wherein at least a portion of the membrane is positioned adjacent to the trench. (see also [0021] -- [0024]), as set forth in claims 1 and 16. Hipwell also inherently discloses a disk drive having at least one disk; a hub; a read/write head as recited in claim 16 (see Background of the invention).

Regarding claim 11, Hipwell et al discloses a head suspension assembly having a suspension arm having an opening (trenches 124-1, 124-2) extending a distance therein; and a membrane (130 including bond pads) positioned on the suspension arm and adapted to "support" a slider 164 (bond pads "support" the slider) thereon, wherein a portion of the membrane is positioned over the opening, all as set forth by claim language, claims 11 and 18.

Regarding claims 3 and 12, Hipwell et al discloses that the suspension arm is formed from silicon ([0013], lines 6-7 and [0015], line 14).

Regarding claims 4-5 and 13-14, Official Notice has been taken that the bond pads in the disk drive technology mostly is formed of either carbon (glassy carbon), copper or gold plated.

Regarding claims 2, 6 and 17, Hipwell et al inherently discloses that the suspension arm and the membrane are formed from materials having different compositions (see above).

Regarding claim 9, Hipwell et al discloses that the membrane is formed from an electrically conductive material.

4. Claims 7-8, 10 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen T. Cao whose telephone number is (571) 272-7569. The examiner can normally be reached on Mon - Thurs (7:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen Cao  
Primary Examiner

AC  
May 9, 2006